INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/050999

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01L51/30

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/45184 A (BROWN BEVERLEY ANNE ; LEEMING STEPHEN WILLIAM (GB); YEATES STEPHEN GEO) 6 June 2002 (2002-06-06) formula 10 page 8, line 20 - line 24	1-8
X	EP 0 848 579 A (TOYO INK MFG CO) 17 June 1998 (1998-06-17) cited in the application tables 1,structure,7	1-7
X	EP 0 917 216 A (LG ELECTRONICS INC) 19 May 1999 (1999-05-19) chemical formula II page 12	1-7

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
30 August 2004	23. 11. 2004

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Wolfbauer, G

Form PCT/ISA/210 (second sheet) (January 2004)

INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	HOSHINO S ET AL: "DEVICE PERFORMANCE OF AN N-CHANNEL ORGANIC THIN-FILM TRANSISTOR WITH LIF/AL BILAYER SOURCE AND DRAIN ELECTRODES" JAPANESE JOURNAL OF APPLIED PHYSICS, PUBLICATION OFFICE JAPANESE JOURNAL OF APPLIED PHYSICS. TOKYO, JP, vol. 41, no. 7A, PART 2, 1 July 2002 (2002-07-01), pages L808-L810, XP001151607 ISSN: 0021-4922 figure 1 -----	1-7

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-8

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-8

A fluorinated organic conductor material for LEDs.

1.1. claims: 1-7

A conductor material represented by chemical Formula I.

1.2. claims: 1-8

A conductor material represented by chemical Formula II, XV and XXI.

1.3. claims: 1-7

A conductor material represented by chemical Formula III.

1.4. claims: 1-7

A conductor material represented by chemical Formula IV.

1.5. claims: 1-7

A conductor material represented by chemical Formula V.

1.6. claims: 1-7

A conductor material represented by chemical Formula VI.

1.7. claims: 1-7

A conductor material represented by chemical Formula VII.

1.8. claims: 1-7

A conductor material represented by chemical Formula VIII.

1.9. claims: 1-7

A conductor material represented by chemical Formula IX.

1.10. claims: 1-7

A conductor material represented by chemical Formula X.

1.11. claims: 1-7

A conductor material represented by chemical Formula XI.

1.12. claims: 1-7

A conductor material represented by chemical Formula XII.

1.13. claims: 1-7

A conductor material represented by chemical Formula XIII.

1.14. claims: 1-7

A conductor material represented by chemical Formula XIV.

1.15. claims: 1-8

A conductor material represented by chemical Formula XVI, XX, XXII and XXVI.

1.16. claims: 1-8

A conductor material represented by chemical Formula XVII and XXIII.

1.17. claims: 1-8

A conductor material represented by chemical Formula XVIII and XXIV.

1.18. claims: 1-8

A conductor material represented by chemical Formula XIX and XXV.

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2. claims: 9-10

A diode comprising at least one conductive fluorinated organic substance.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/IB2004/050999

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 0245184	A	06-06-2002	AU	2081802 A	11-06-2002
			CA	2427222 A1	06-06-2002
			CN	1478309 T	25-02-2004
			EP	1340270 A1	03-09-2003
			WO	0245184 A1	06-06-2002
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			DE	69720154 D1	30-04-2003
			DE	69720154 T2	04-12-2003
			EP	0848579 A2	17-06-1998
			US	5948941 A	07-09-1999
EP 0917216	A	19-05-1999	CN	1217582 A	26-05-1999
			EP	0917216 A2	19-05-1999
			JP	11233263 A	27-08-1999
			US	6248458 B1	19-06-2001
			US	2004104397 A1	03-06-2004
			US	2001031380 A1	18-10-2001